What is claimed is:

- A process for producing plastics moldings with a thickness of 30-200 mm by thermal polymerization of a mixture of a residual initiator-free polymethyl (meth)acrylate syrup and a mixture consisting of MMA and the customary additives and an olefinic carbocyclic compound.
- 10 2. The process as claimed in claim 1,

characterized in that

- the residual initiator-free polymethyl (meth)acrylate syrup has the following properties:
 - content of initiator peroxides used: below the detection limit (< 5 ppm)
 - average molecular weight M_w 240 000-350 000
- - viscosity: 30-60 seconds (Ford cup).
- 25 3. A process for preparing a residual initiator-free polymethyl (meth) acrylate syrup,

characterized in that

- 30 a mixture of:
 - 100 parts of MMA and 0.05-0.1 part of peroxydicarbonate
- is incipiently polymerized up to conversion of 10-30%.
 - 4. Sheets of PMMA obtainable by a process of claim 1.

- 5. The use of the sheets of PMMA as claimed in claim 4 for producing aquaria.
- 5 6. The process as claimed in claim 1,

characterized in that

- the carbocyclic compound is used in amounts of 50-300 ppm based on the amount of the polymerization batch.
 - 7. The process as claimed in claim 1,
- 15 characterized in that the carbocyclic compounds used are terpenes.
- 8. The process as claimed in claim 1,
 20 characterized in that

the terpene used is γ -terpinene.